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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,088	02/27/2004	Masayuki Tamai	NY-KIT-367-US	7537
24972	7590	01/25/2006	EXAMINER	
FULBRIGHT & JAWORSKI, LLP			CHOI, JACOB Y	
666 FIFTH AVE			ART UNIT	
NEW YORK, NY 10103-3198			PAPER NUMBER	
			2875	

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/789,088

Applicant(s)

TAMAI ET AL.



Examiner

Jacob Y. Choi

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 November 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 7-14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 7-14 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

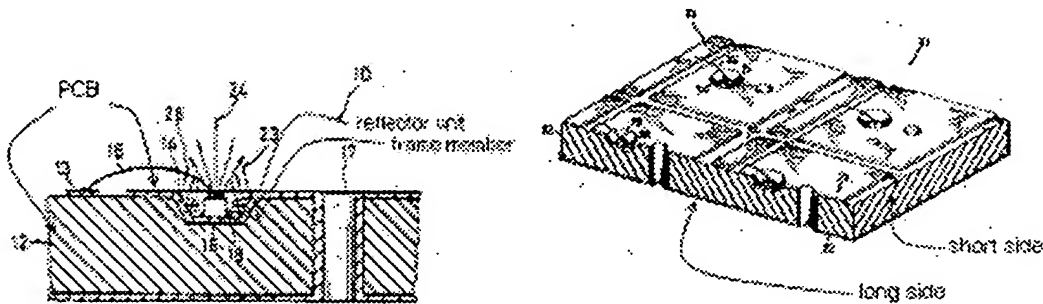
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7-11 & 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Chen (USPN 5,119,174).

Regarding claim 7, Chen discloses a printed circuit board (PCB; e.g., 21, 22, 12 & 13), a wiring land (e.g., Figure 1) formed on the printed circuit board (e.g., 21, 22, 12 & 13), a light-emitting diode (e.g., 15) element surface-mounted on the printed circuit board (PCB), a bonding wire (16) connecting between the LED element and the wiring land (Figure 2-3), and a reflector unit (e.g., 14) mounted on the printed circuit board (PCB) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 12; "PCB base"), and a reflector (14) connected with an inner side of the frame member (12) and supported to the frame member (12), and reflector (14) being arranged between the LED (15) element and the wiring land (e.g., Figure 1) for directing

a beam emitted (e.g., 23-25) from the LED element toward an object to be illuminated (e.g., display area).



Note: claims in a pending application should be given their broadest reasonable interpretation. *In re Pearson*, 181 USPQ 641 (CCPA 1974).

Regarding claim 8, Chen discloses the frame member is rigidly formed in unison with the reflector.

Regarding claim 9, Chen discloses the frame member comprises a rectangular frame (e.g., Figure 1) member having a long-side portions and short-side portions.

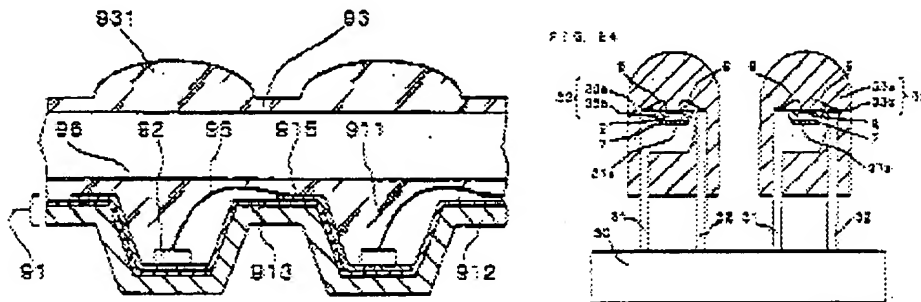
Regarding claim 10, Chen discloses the wiring land is laid at an area between the reflector and the frame member (e.g., Figures 2-3).

Regarding claim 11, Chen discloses the bonding wire (16) is laid to leap over the reflector (e.g., Figures 2-3).

Regarding claim 13, Chen discloses the light source unit includes a plurality of the LED elements arranged in the form of an array to form an LED array.

3. Claims 7, 8 & 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugimoto et al. (USPN 6,874,910).

Regarding claim 7, Sugimoto et al. discloses a printed circuit board (e.g., 91), a wiring land (e.g., Figure 25) formed on the printed circuit board (91), a light-emitting diode (e.g., 92) element surface-mounted on the printed circuit board (91), a bonding wire (95) connecting between the LED element and the wiring land (Figure 25; e.g., 915), and a reflector unit (e.g., 913; column 3, lines 20-40; *"the insulating layer which may interrupt the effect of heat radiation (light) ... the die bonding paste is commonly a silver particles dispersed resin material ... etc"*) mounted on the printed circuit board (91) surround the LED elements, the reflector unit comprising, a rigid frame member (e.g., 912; aluminum) and a reflector (913) connected with an inner side of the frame member (912) and supported to the frame member (912), and reflector (913) being arranged between the LED (92) element and the wiring land (e.g., Figure 25) for directing a beam emitted (e.g., 931) from the LED element toward an object to be illuminated (e.g., display area).



Regarding claim 8, Sugimoto discloses the frame member is rigidly formed in unison with the reflector.

Regarding claim 10, Sugimoto discloses the wire land is laid at an area between the reflector and the frame member.

Regarding claim 11, Sugimoto discloses the bonding wire (95) is laid to leap over the reflector (e.g., Figures 24 & 25).

Regarding claim 12, Sugimoto discloses the reflector comprises a relay land (915) on a top face thereof and the bonding wire (95) is laid via the relay land.

Regarding claim 13, Sugimoto discloses the light source unit includes a plurality of the LED elements arranged in the form of an array to form an LED array.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chen (USPN 5,119,174).

Regarding claim 14, Chen discloses the light source unit suggesting a light emitting diode display with PCB base improving the stability of the wavelength (color) of the LED and decrease the deprecating the light output of the LED to prolong the life of the display.

However, Chen failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from

a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sugimoto et al. (USPN 6,874,910).

Regarding claim 14, Sugimoto discloses the light source unit includes a plurality of the LED arrays for red, blue and green colors.

However, Sugimoto failed to mention the arrays of LED(s) are utilized for a color film scanner.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

#### ***Response to Amendment***

6. Examiner acknowledges that the applicant has canceled claims 1-6 and newly presented claims 7-14 further limiting the independent claim with details of "a rigid frame". Claims 7-14 are pending in the application.

#### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the different ground(s) of rejection, as noted above. Applicant's

presented argument is not relevant because the arguments are not related to the previously noted rejection(s) but rather newly presented claims 7-14, especially the independent claim 7.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any




extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacob Y. Choi whose telephone number is (571) 272-2367. The examiner can normally be reached on Monday-Friday (10:00-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC



Sandra O'Shea  
Supervisory Patent Examiner  
Technology Center 2800